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A CULTURAL RESOURCE SURVEY OF PLACENTIA CANAL CHATHAM
COUNTY GEORGIA(U) SOUTHEASTERN ARCHEOLOGICAL SERVICES
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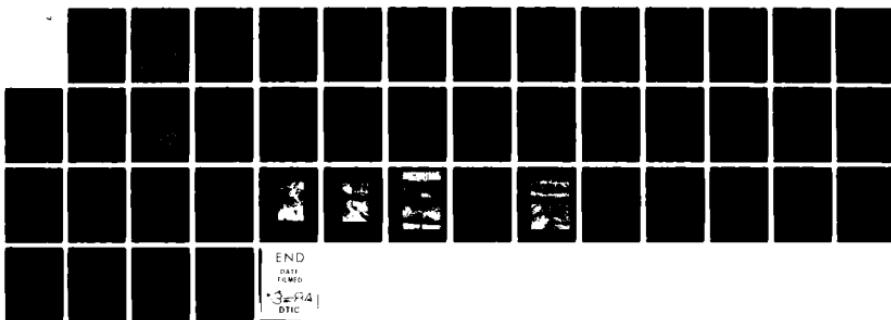
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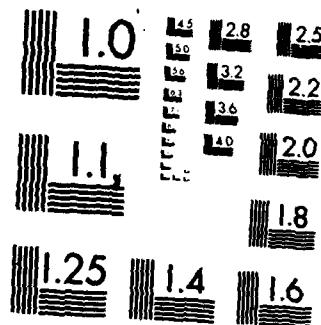
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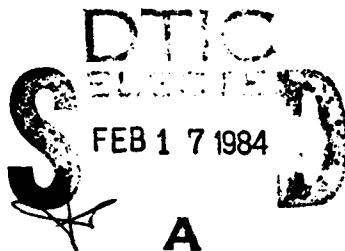
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A CULTURAL RESOURCE SURVEY OF PLACENTIA CANAL, CHATHAM COUNTY, GEORGIA

CHESTER B. DePRATTER
ROY R. DOYON

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SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) A Cultural Resource Survey of Placentia Canal, Chatham County, Georgia		5. TYPE OF REPORT & PERIOD COVERED Final
7. AUTHOR(s) Chester B. DePratter Roy R. Doyon		6. PERFORMING ORG. REPORT NUMBER DACW21-83-M-1176
9. PERFORMING ORGANIZATION NAME AND ADDRESS Southeastern Archeological Services, Inc. P.O. Drawer 8086 Athens, Georgia 30603		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS SASPD-EI U.S. Army Corps of Engineers, Savannah District P.O. Box 889 Savannah, Georgia 31402		12. REPORT DATE 6 February 1984
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		13. NUMBER OF PAGES 42
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited.		15. SECURITY CLASS. (of this report) Unclassified
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Archaeology Mosquito borne diseases Canals Georgia History Diseases		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Research on the Placentia Canal project, Chatham County, Georgia, consisted of an historic documents search and an archaeological survey. The project is on the eastern fringes of the City of Savannah and on the western margin of Thunderbolt, Georgia. A two-hundred-foot-wide corridor along the existing 2.5-mile-long canal right-of-way was surveyed. No significant archaeological sites were identified		

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within the field through either field survey or a check of the State of Georgia Archaeological Site Files.

Historic documentation indicates that Placentia Canal was constructed through or near the Placentia Plantation between 1877 and 1887. Construction of this and other related canal systems was stimulated by the Savannah yellow fever epidemic of 1876.

Future excavation or construction within the Placentia Canal corridor will not impact significant archeological or historical cultural resources.

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OF PLACENTIA CANAL
CHATHAM COUNTY, GEORGIA

In Fulfillment of
PURCHASE ORDER NO. DACW21-83-M-1176

Submitted to

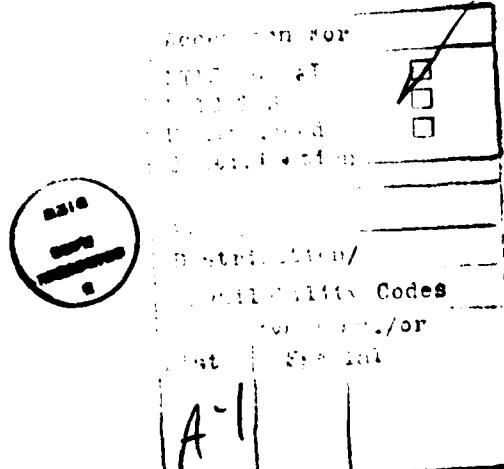
U.S. Army Corps of Engineers
Planning Division
Environmental Resources Branch
P. O. Box 889
Savannah, Georgia

By

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and
Roy Doyon

Southeastern Archeological Services, Inc.
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6 February 1984



MANAGEMENT SUMMARY

A cultural resources survey of Placentia Canal, Savannah was conducted by Southeastern Archeological Services between October 3 and October 19, 1983. Roy Doyon and Chester DePratter conducted the archival research and Chester DePratter directed the field investigations.

The 2.6-mile-long Placentia Canal project area runs through low, swampy land throughout most of its length. Archeological investigation consisted of a walkover survey conducted by a two-person team. Both exposed banks of the canal and the adjacent spoil piles were checked for site debris. No significant archeological sites were recorded by this survey.

Pleistocene shells, apparently originating in the lower portions of the canal excavations, were present in canal spoil along much of the canal right-of-way. In no case were bones of megafauna present in the spoil. It is likely that the canal intersected Pleistocene beach deposits, as most of the shell fragments were from beach species (i.e., Donax sp.).

The initial historical investigation of the Placentia Canal was conducted in Savannah. City and county records were checked at the Savannah City Engineers and the Chatham

County Engineers offices. Additional research was conducted at the University of Georgia Library.

Historical research indicates that the Placentia Canal derives its name from the Placentia Plantation, an early nineteenth century rice plantation. The exact date of the construction of the canal has yet to be ascertained although it was apparently the work of the Drainage Commission in the last quarter of the nineteenth century. The Drainage Commission was established by an Act of the State Legislature in 1877 after a yellow fever epidemic had ravaged the population of Savannah in 1876.

In summary, archival research has found no significant historical structures or events to be associated with the canal. The canal itself appears to be a portion of a fairly extensive drainage network constructed in the late nineteenth century and is by itself not significant in terms of eligibility to the National Register of Historic Places. Field examination of the canal right-of-way did not result in identification of any significant prehistoric or historical archeological sites. No sites eligible for nomination to the National Register of Historic Places were recorded. Construction and/or excavation within the 60-meter-wide canal corridor will have no impact on significant archeological or cultural resources.

ABSTRACT

Research on the Placentia Canal project, Chatham County, Georgia, consisted of a historic documents search and an archeological survey. The project area is on the eastern fringes of the City of Savannah and on the western margin of Thunderbolt, Georgia.

A two-hundred-foot-wide corridor along the existing 2.5-mile-long canal right-of-way was surveyed. No significant archeological sites were identified within the field through either field survey or a check of the State of Georgia Archaeological Site Files.

Historic documentation indicates that Placentia Canal was constructed through or near the Placentia Plantation between 1877 and 1887. Construction of this and other related canal systems was stimulated by the Savannah yellow fever epidemic of 1876.

Future excavation or construction within the Placentia Canal corridor will not impact significant archeological or historical cultural resources.

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INTRODUCTION

This report details the results of a cultural resources survey and evaluation of the Placentia Canal right-of-way in Chatham County, Georgia. The canal, which runs along the eastern margin of the city of Savannah, has a drainage area of about 2.6 square miles. The 2.5-mile-long canal begins in a subdivision located to the south of DeRenne Avenue and flows north to its outlet near Bonaventure Cemetery on the Wilmington River (Figure 1).

The project was carried out under contract with the U.S. Army Corps of Engineers, Savannah District, to meet the requirements of the National Historic Preservation Act of 1966, as amended, Executive Order 11593 (Protection and Enhancement of the Cultural Environment), and the Archeological and Historic Preservation Act of 1974. The study includes both a historic documents review and a field survey.

Chester B. DePratter served as principal investigator. Fieldwork was conducted by Chester B. DePratter and Ron Schoettmer. Historical research was conducted by Roy Doyon and Chester B. DePratter.

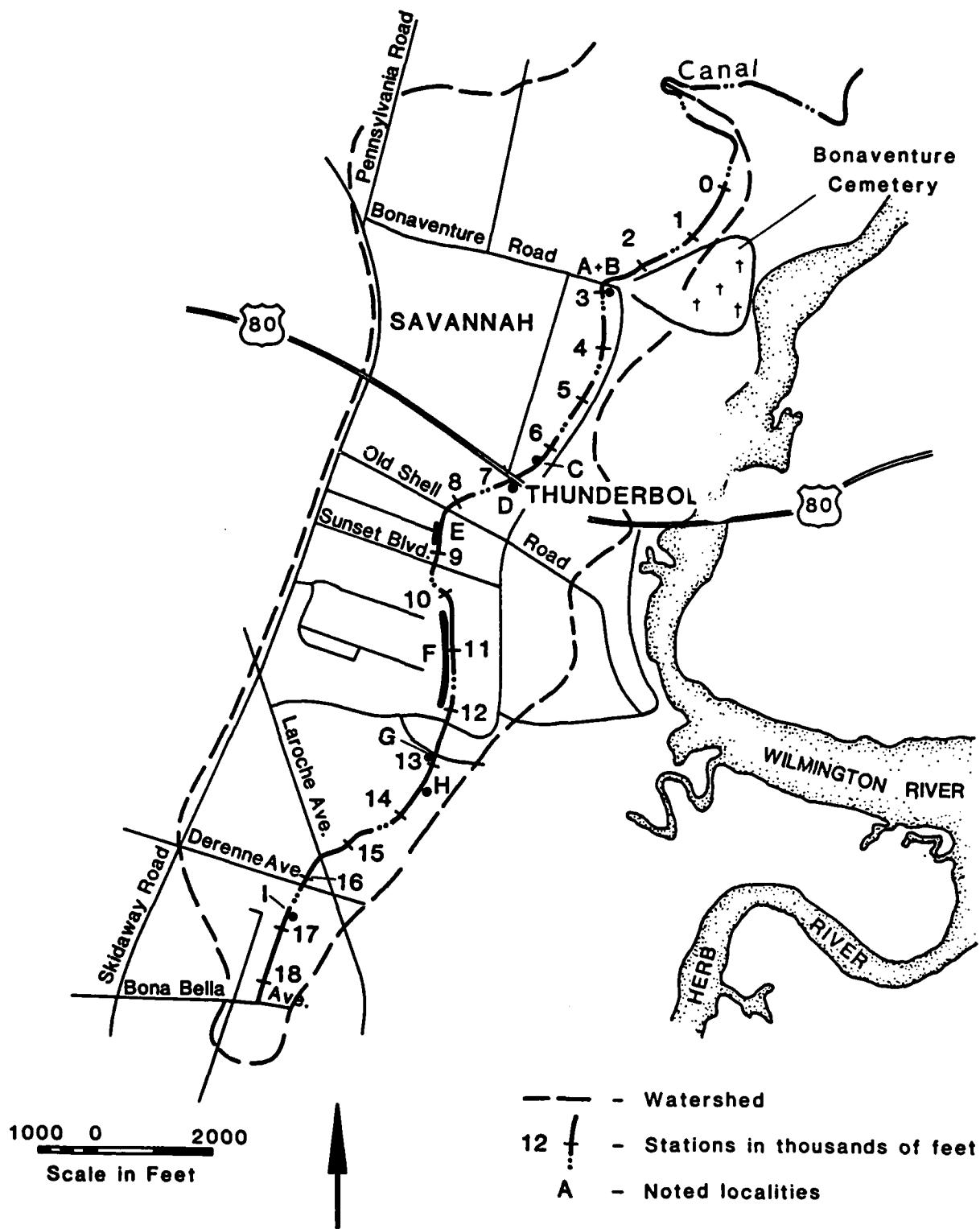


Figure 1. Placentia Canal Project Area. Station distances from Flood Plain Information, Placentia Canal, Savannah and Chatham County, Georgia. U.S. Army Corps of Engineers, 1972.

HISTORICAL BACKGROUND

The historical analysis of this study concentrated on specific site attributes of the Placentia Canal study area and its relationship to the surrounding locale. The initial task was to identify any structures, historical events or persons that had been associated with the study area that would warrant the nomination of all or part of the study area for inclusion into the National Register of Historic Places. In conjunction with this task, maps and archival sources were examined for site-specific information that could be passed to the project archeologists to assist them in their site sampling strategies.

The second task emphasized the situational aspects of the study, that is, how the study area relates to the Savannah area both locationally and historically. In the latter examination, society's perception of two diseases, yellow fever and malaria, provide the focus for the analysis.

Evolution of Site

Stoddard (1973:9) states that the town of Thunderbolt, located directly east of the study area, was probably an Indian settlement prior to the establishment of the white settlement and fort placed at that site in 1733.

Thunderbolt was the first of three forts established by Oglethorpe to protect Savannah from attack by the Spanish. A small settlement of ten families (28 persons) resided at Thunderbolt by 1734, and a palisaded hexagonal fort with four cannons was built there to protect the southern water passage (Stoddard, 1973:9-12). The settlement at Thunderbolt, however, was short-lived and by 1740 was "almost deserted" (Candler, Colonial Records, Vol. V:60). There is no evidence of any specific activity within the Placentia Canal study area during these early years.

North of the study area Thomas Causton, in 1738, established his plantation at Causton Bluff on a 260-acre tract. At its peak of prosperity, Causton's plantation encompassed more than 3,000 acres (Granger, 1947:3). Large-scale rice plantations often associated with coastal Georgia, however, were not feasible economic ventures until the legal introduction of slavery into the colony in 1754. It was at this date that the Royal Charter was issued and Georgia, no longer under the strict control of the Trusteeship, became a Royal Colony.

Little site-specific evidence concerning the study area is available for the period 1740 until the Revolutionary War. It is certain, however, that rice plantations were being established during that interval, and an economy based on slavery was becoming firmly established throughout the region. During the Revolutionary War the Continental

forces requisitioned a site known as the "Oyster House" at Thunderbolt as a hospital for the Continental naval and land forces (Candler, Revolutionary War Records, Vol. II:31).

Sometime between the establishment of the Royal Charter and 1806, Placentia Plantation was established in the study area. This plantation contained 1,200 acres situated between Thunderbolt and the Skidaway Road. It was the dominant occupance unit in the study area. Figure 2, an enlargement of a for-sale advertisement that appeared in a Savannah newspaper in 1806, contains useful land-use information concerning the plantation and illustrates the diversity of agricultural activity in the area. The seller, John Williamson, in addition to being involved in plantation activities, was a prominent Savannah businessman and in 1808 was elected mayor of that city. Unfortunately, no site-specific information concerning the plantation could be found and the structural layout of the plantation is not known. The name Placentia, however, has persisted. When the tract was subdivided into many thin, long lots (resembling French long lots) in 1909, the plat of the entire subdivision was called the "Placentia Tract" (Chatham County, Georgia, Deed Book 10-B-64, Map Book 4-190). The tract may have been subdivided long before 1906, however, because an 1883 real estate transaction involved "33 acres of land, known as the Placentia Tract" (Savannah Morning News, December 5, 1883:4).

PLACENTIA.

THE Subscriber offers for Sale that valuable Plantation at Thunderbolt, generally known by the name of Placentia—Containing upwards of 12,00 Acres—340 of which is good Cotton and Corn Land, already cleared, and partly cultivated—160 acres is prime Rice land, of which 120 acres are under Cultivation. The remainder is good, high, Pine land. Any person wishing to purchase, will please apply at my Counting Room, where the platt of the Land shall be shewn them and the terms made known.

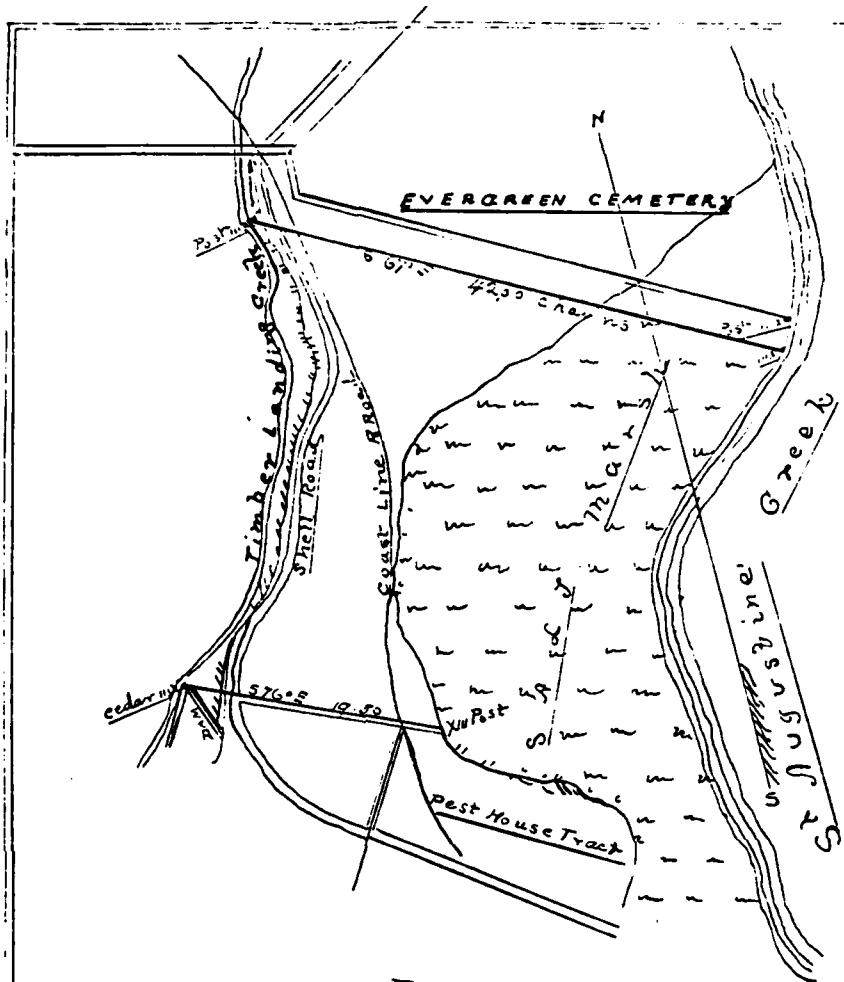
Jno. P. Williamson.

January 7

Figure 2. Sale advertisement, Placentia Plantation (The Georgia Republican, January 7, 1806:3).

The first evidence of the presence of a canal in the study area is contained on a cadastral map of Bonaventure dated 1877 (Georgia Society of Colonial Dames, 1942:29-31). On this plat the canal is labelled "Creek Canal" and follows the same course as the present Placentia Canal. An earlier plat, surveyed in 1872 and shown as Figure 3, indicates that Placentia Canal follows the course of a stream previously known as Timber Landing Creek and shows the location of a dam south of Bonaventure Road. This evidence indicates some sort of lumbering activity had occurred directly in the study area previous to the construction of the canal and also indicates that a canal was built in the study area between 1872 and 1877. Additional examination of cartographic and archival sources did not reveal any site-specific evidence of anything of historical significance that would warrant additional attention.

The primary land use in the vicinity of the study area was the plantation and the predominant activity was the cultivation of rice. In 1893 a severe storm destroyed most of the rice crop in the immediate area. Consequent salt contamination of the rice fields and competitive pressure from productive Louisiana rice fields caused a drastic reduction in rice cultivation in this area and indeed throughout coastal Georgia (Granger, 1947:23-24).



Plan

Of sixty seven Acres of Land - being part of Bonaventure - Surveyed for Major William H. Wetmore January 16th 1872 - Less Ten Acres along the north line which is reserved by the Evergreen Cemetery Company

John R. Debeau

Surveyor Chatham County
Georgia

June 21st 1881

Scale 10 chains per Inch

DEED BOOK 5D-453 SUP. CT. CHATHAM COUNTY COURT HOUSE
TRACING - SAVANNAH UNIT, GEORGIA WRITERS PROJECT 1941 WPA FWA

Figure 3. Plan of "part of Bonaventure," June 21, 1881.

Placentia Canal: An Evaluation

Disease control in the pre-twentieth century era was conducted by-and-large by a populace ignorant of the germ theory of disease propagation. Hence, any historic evaluation of disease control, such as systems of drainage, should consider not only the actual effect of the measures taken, but the medical perceptions of the decision makers at the time of occurrence. In order to assess the significance of Placentia Canal, therefore, it is necessary to examine the event within its historical context, especially regarding the perceptions of the etiological relationships of specific diseases prevalent in that era.

The etiologic relationship of the mosquito to malaria was firmly established in the final two decades of the nineteenth century. Laveran first discovered the malaria parasite in human blood in 1880, but it was not until 1899 that the Italian researchers, Bastianelli, Bignami, and Grassi were able to establish that the Anopheles mosquito was the vector for human malaria. The identification of the precise vector was important because the ecological patterns of different species of mosquitoes vary considerably. The Anopheles mosquito feeds at night, is a weak flier, and seldom ranges more than a mile from its breeding ground. It proliferates in fresh, tranquil, warm waters and prefers sunny waters where vegetation flourishes (Meade, 1980:78). Malaria is not traditionally associated with urban areas except in cases where swamps are close to population

concentrations. Throughout the early history of America, malaria was predominately a frontier or rural disease. Plantations, and especially rice plantations, presented a particularly favorable environment for the transmission of the disease.

Whereas malaria can be traced back to ancient Roman times, yellow fever has had a considerably shorter history. The first reported epidemic occurred in the Caribbean in the mid-seventeenth century. The etiologic relationships of yellow fever were unknown until Major Reed's work with the American Yellow Fever Commission in Havana. In 1900 Reed identified the Aedes aegypti mosquito as the specific vector for yellow fever. This mosquito, unlike the Anopheles mosquito, is a domesticated, urban and house-oriented species. Breeding by preference in artificial containers, such as water cisterns, it generally avoids bodies of water with mud or sand bottoms. This mosquito was easily transported from the tropics, where it is endemic, by ship to seaports in more temperate areas. For more than 200 years, yellow fever epidemics caused considerable consternation along the coast of the United States and repeated outbreaks occurred in Savannah during the nineteenth century. Garrison (1981:2-3) stated that the "principal reason for construction of [the Casey Canal] was to provide drainage of the Cuyler Swamp. . . a breeding ground for mosquitoes that carried yellow fever." The Casey Canal and other Savannah canals were, in fact, constructed

to drain swamps, but mosquitoes were not known to be carriers of either malaria or yellow fever at the time.

For centuries the etiological relationship between swamps and acute fevers was widely recognized. It was believed that foul air, often called miasma, was generated in swamps by rotting organic matter and other agents. The term malaria, in fact, is a combination of two Italian words which literally mean bad (mala) air (aria) (Russell, 1955:17).

The belief in spontaneous generation lasted well into the nineteenth century. A famous alchemist, van Helmont (1577-1644), believed that "the smells which rise from the bottom of morasses produce frogs, slugs, leeches, grasses, and other things" (Russell, 1955:25). Aristotle held a similar belief that "all dry bodies which become damp and all damp bodies which are dried engender animal life" (Russell, 1955:25).

Plantation owners in coastal Georgia seldom spent the summers on their plantations and preferred to stay in summer homes in cities, such as Savannah, or in towns far inland on the Piedmont. If they had to stay in the Coastal Plain, it was believed better to live along rivers or on the sea islands, locations perceived to be more healthy. At Causton's Bluff, Robert Habersham's overseer in 1852 objected to spending the entire year at the plantation because "the miasma made the summer months unhealthful on the rice plantation. . . ." A new house away from the rice

fields was constructed for the overseer and he was induced to stay (Granger, 1947:18). Frederick Law Olmstead told of a Charleston rice plantation owner who reported that he "would as soon stand fifty feet from the best Kentucky rifleman and be shot at by the hour, as to spend a night on my own plantation in summer" (Meade, 1980:81).

In 1817, an ordinance was passed in Savannah that prohibited wet rice cultivation in the area surrounding the city. Meade reports that this forced almost 10% of the Savannah River Valley rice land out of production (Meade, 1980:82). The dry culture ordinance is estimated to have reduced the incidence of malaria from one in ten in 1817 to one in 63 by 1818. Nevertheless, malaria remained a principal cause of death in Chatham County.

Major epidemics of yellow fever struck Savannah in 1820, 1854, and 1876 with milder epidemics occurring in other years. The epidemic of 1820 resulted in 666 deaths between May and December, and the panic-stricken populace fled the city so that by September 14, only 1,500 out of a total population of 5,000 remained in the town.

During the epidemic of 1854 Mayor John Ward stated that the cause of the epidemic was:

... an atmospheric storm passing over the whole Southern country and taking our city in its course. It doubtless followed certain definite laws, but so did the tempest that swept over our city on the eighth of September. They both expressed the will of the great lawgiver--of Him, at whose command the storm or the pestilence arises and pursues its course, baffling the power or the skill of man, until it has accomplished His wise purposes (Usinger, 1944:145).

In Charleston in 1858, a yellow fever epidemic resulted in 717 deaths. In a report by a committee established to evaluate the epidemic, divergent views for preventing future epidemics were reported. One group held that stricter enforcement of quarantine was sufficient to prevent the importation of the disease while another group held that the epidemics were the result of local causes and that stricter sanitary ordinances in the city were needed to prevent future epidemics (City Council of Charleston, S.C., 1859:4). The latter group recommended five specific areas for reform: (1) street sanitation; (2) restriction in the number of cows allowed in city (due to excessive manure heaps); (3) regulation of privy vaults; (4) prohibition of cemeteries in the city (these produced dangerous exhalations from the receptacles of the dead); and (5) improved drains and sewers (City Council of Charleston, S.C., 1859:18-21).

The committee polled the doctors of Charleston as to their views of the causes of the epidemic and methods of prevention. They generally agreed that if yellow fever is imported, it could not become epidemic unless the atmosphere of Charleston was in the same condition as the atmosphere of Havana (City Council of Charleston, S.C., 1859:45).

The 1876 yellow fever epidemic was by far the most disastrous to hit Savannah. The following account describes the impact of the disaster:

. . . all unexpected and unheralded the plague leaped upon us. In sixty days nearly one-tenth of the population fell victim to the yellow fever, and yet its ravages were not stayed. God! what a

fearful time it was. . . . Hardly a household escaped, and it is melancholy to note in this festive season that no ringing laugh of childhood is heard about the Christmas board, and only humid eyes are seen, fixed upon the vacant places. (Savannah Morning News, January 1, 1877:3)

The first reported case in the 1876 epidemic occurred on the 21st of August. Panic quickly set in, and all who could afford to leave the city did so. An estimated 8,000 refugees left the city out of a population of 30,000. On the 31st of August the Augusta Board of Health met to discuss precautionary measures. They decided that all trains coming from Savannah had to be stopped outside of the city and all the cars properly ventilated (The Daily Constitution, August 31, 1876:4). At that meeting Doctor Campbell remarked that yellow fever never originated in Augusta. "He believed that a trunk of air brought to Augusta from Charleston or Savannah would initiate yellow fever In all cases where the epidemic commences infected air is brought in by some means--in trunks, hat boxes or some other way" (The Daily Constitution, August 31, 1876:4). The fever spread to other cities. Brunswick, Darien, and Thomasville were reporting cases by the latter part of September (The Daily Constitution, September 23, 1876:5). Le Hardy, an observer in Savannah, estimated that during the course of the epidemic there were 10,000 cases of yellow fever, 1,066 of which were fatal (Usinger, 1944:146).

In the aftermath of the epidemic the State Board of Health convened in Savannah to investigate the epidemic. Following an in-depth investigation, they issued their

findings. In their interviews with the medical men of Savannah they found that the importation hypothesis was rejected with most doctors agreeing that local causes were responsible for the epidemic (Georgia State Board of Health, 1877:120). Their report was extremely critical of the sanitation conditions of the city, particularly with the unfavorable conditions of the system of drainage in the undeveloped areas around the city. They urged a stricter quarantine system and that the "low grounds surrounding the city, as with a cordon of malarial influences, should be thoroughly and systematically drained, at whatever cost" (Georgia State Board of Health, 1877:128).

On the 28th of February, 1877, an Act of the State Legislature authorized the creation of a Commission on Drainage for Chatham County. The Act provided for the drainage of Chatham County "so as to protect the state from epidemics of yellow fever and other diseases" (Chatham County, Georgia, Minutes of the Drainage Commission, 1877:2). The Chatham County Commission was already at work on the problem prior to the passage of the Act, however, because on February 22, 1877, they appointed a special Drainage Commission composed of Mayor John F. Wheaton, C. C. Casey, Dr. J. G. Thomas, Col. John Screven, and Gen. J. F. Guilmer. The Drainage Commission was to be given one-third of the state taxes due the county to fund its operations (Savannah Morning News, February 22, 1877:3).

Within only a few weeks, Cuyler Swamp (now drained by Casey Canal) was identified as one of the main low-lying areas that required immediate attention (Savannah Morning News, March 13, 1877:3), but that project was delayed for a few years. Instead, the Commission worked on the Springfield Plantation located west of the city and drained by the Hogg Ditch and its tributaries (Savannah Morning Telegram, June 23, 1878:3).

By mid-1879, the Commission had switched their attention to the southern margin of the city as is indicated in their report issued in July, 1879:

The appropriations authorized for the purposes recited in the act to provide for the drainage of Chatham County has amounted to \$27,633.73. As the conspicuous object of the act was to "protect the state from epidemics of yellow fever," the first efforts of the Commissioners were directed to the improvement of Springfield plantation.

The attention of the Commissioners was then directed to the drainage of malarial ponds on the southern side of the city and of the Teynac Swamp.

The obstacle to the complete drainage lies in Cuyler Swamp. The drainage of this swamp will involve an appropriate canal.

The Commissioners realize the magnitude of such an enterprise and the cost attending to it, but they also appreciate its great public value. (Savannah Morning News, July 17, 1879:3).

The need to improve drainage in Teynac and Cuyler swamps had been pointed out in the previous year by the Medical Society of Savannah (Chatham County, Georgia, Minutes of the Drainage Commission, 1878:120).

Excavation of the Cuyler Canal was begun on May 5, 1880. The canal was to drain both Cuyler and Teynac swamps, so both of these areas must have been south and east of the city. Convict labor, housed in a camp on Waters Avenue, was used to dig the canal. In June, 1880, the convict labor force consisted of 30 men (Savannah Morning News, June 12, 1880:3).

By mid-1882, a total of 851 convicts had worked on the Cuyler Swamp Canal (Savannah Morning News, July 4, 1883:4). In September of 1883, 72 convicts were occupied in excavating the canal (Savannah Morning News, September 27, 1883:4).

The Chatham County Grand Jury visited the convict camp in May, 1883, and found the 78 convicts there "well provided for in every way, with medical attendance, good food, and a minister." Running the camp cost \$10,000 per year, but the Grand Jury concluded that the results justified the expense. They recommended that once the Cuyler Canal was completed, the convicts should be shifted to the Springfield Plantation area to extend the existing canal system there to drain all of the area South and West of the city. The Grand Jury realized that in addition to draining unhealthy swamplands, the canal system would open up large land areas to cultivation (Savannah Morning News, May 1, 1883:3).

In a progress report published May 10, 1884 (Savannah Morning News, p. 2), the point was made that completion of the Cuyler Canal would open thousands of acres of land to truck farming. As the author of that article put it,

"success of the Cuyler Swamp Canal shows that the entire swamp lands of the country can be drained and Chatham made the most productive agricultural county in the State."

By March, 1885, work on the Cuyler Canal was completed. In its final stages, work on the canal had been directed by Commissioner Casey, who suggested that the fill from the canal be leveled and turned into a roadway that would run the length of the canal (Savannah Morning News, March 31, 1885:8) This plan was apparently never put into effect, however.

Following completion of the Cuyler Canal, the Commission turned its attention to other areas. Musgrove Creek, west of the city, was considered as a possible project (Savannah Morning News, March 31, 1885:8). The drainage area covered by the Cuyler Canal was expanded by tributary canal excavation in 1886 and 1887 (Savannah Morning News, March 2, 1886:8; September 15, 1887:4; September 15, 1887:8). Sometime late in 1885 or early in 1886, the name of Cuyler Canal was changed to Casey Canal after the Drainage Commissioner who directed the project in its final stage (Savannah Morning News, March 2, 1886:8; August 1, 1891:4).

Although no records were found relating to construction of a "Placentia Canal," a report of a County Commission meeting does refer to a drainage project that might later have been christened "Placentia." That report states that "the Bonaventure drainage was completed by the chain gang

last month" (*Savannah Morning News*, April 14, 1887:8).

While this report may refer to drainage of the Bonaventure Cemetery (Evergreen Cemetery on Figure 3), it is more likely that it refers to the area North and West of Thunderbolt in the vicinity of the present Placentia Canal. On Figure 3, the surveyed tract located East of Timber Landing Creek (now Placentia Canal) is identified in the written description as "being part of Bonaventure." Work on this canal might have been an expansion of the previously discussed "Creek Canal" seen on the 1877 map.

In 1889, the Chatham County Drainage Commission had been in operation for twelve years. The *Savannah Morning News* (August 27, 1889:8) presented the following summary of work conducted to date by the Commission:

County Engineer E. J. Thomas says that the county has constructed in the period mentioned [1877-1889] 189,943 feet, or about 34-1/2 miles, of canals and ditches, excavating 402,936 cubic yards of earth, besides the necessary cleaning, etc. Its road will add 40,000 more cubic yards of earth work, and these improvements would have cost the county at least \$100,000 by any other system except that in which the chain-gang has been utilized.

The work of drainage is done under the supervision of the drainage committee of the board of County Commissioners and County Engineer E. J. Thomas, the chain-gang being divided into two corps, No. 1, or Shuman's gang, working on the east side, and No. 2., or Allen's gang, working on the west. The convicts are docile, and very few guards are required. Trusties carry water for the workmen, and the sanitation of the camps is such that there is very little sickness among the men.

The extent and cost of the drainage system demonstrates the importance of that project which still was far from complete

in 1889. As a matter of fact, the number of chain-gang crews had been increased to two to increase the scope of the work.

All did not go well for the drainage project in the years after 1899. In the early 1890's, the Casey Canal and other systems did not function properly (Savannah Morning News, March 15, 1891:8; August 1, 1891:4, 8). Modifications were made in the Casey Canal over the next fifty years (Garrison, 1981:16), and it is likely that similar modifications were made in other parts of the system.

Hence it was in the aftermath of the 1876 yellow fever epidemic that Placentia and other canals were constructed using convict labor. It is ironic that the canal system was ineffective against the yellow fever vector, however. The drainage project did open up extensive lowlands to cultivation and further development, and much of the twentieth century growth of Savannah has been in areas drained under the direction of the Chatham County Drainage Commission established in 1877.

ARCHEOLOGICAL SURVEY

Archeological examination of the 2.5-mile-long Placentia Canal right-of-way was conducted by Chester B. DePratter, Principal Investigator, and Ron Schoettmer, Field Assistant, on October 10-12, 1983. Examination of the project area consisted of a walkover survey that extended from 30 meters north of Bonaventure Road (Figure 1) to 300 meters south of DeRenne Avenue.

Banks of the canal (Plates 1 and 2), spoil heaps along the canal, exposed surface areas (Plate 3) and all potentially habitable portions of the right-of-way were examined. No subsurface testing was conducted for several reasons. First, the canal with its exposed banks and adjacent spoil deposits provided subsurface exposure along the entire length of the canal. The canal banks thus provided greater subsurface exposure than would normally be achieved in archeological survey of a 60-m-wide corridor. Subsurface testing using posthole diggers or shovel tests would have added only a small increment of subsurface data.

Second, the canal carries large amounts of water, primarily run-off from adjacent developed areas, but its sediment load is light due to the sandy nature of coastal soils. Thus, the probability of sites being buried was considered to be very small.



Plate 1. Placentia Canal. View to north from Bonaventure
Golf Club bridge.



Plate 2. Placentia Canal. View to north through campus of Savannah Christian School.



Plate 3. Placentia Canal and park construction at Sunset Boulevard. View to northwest.

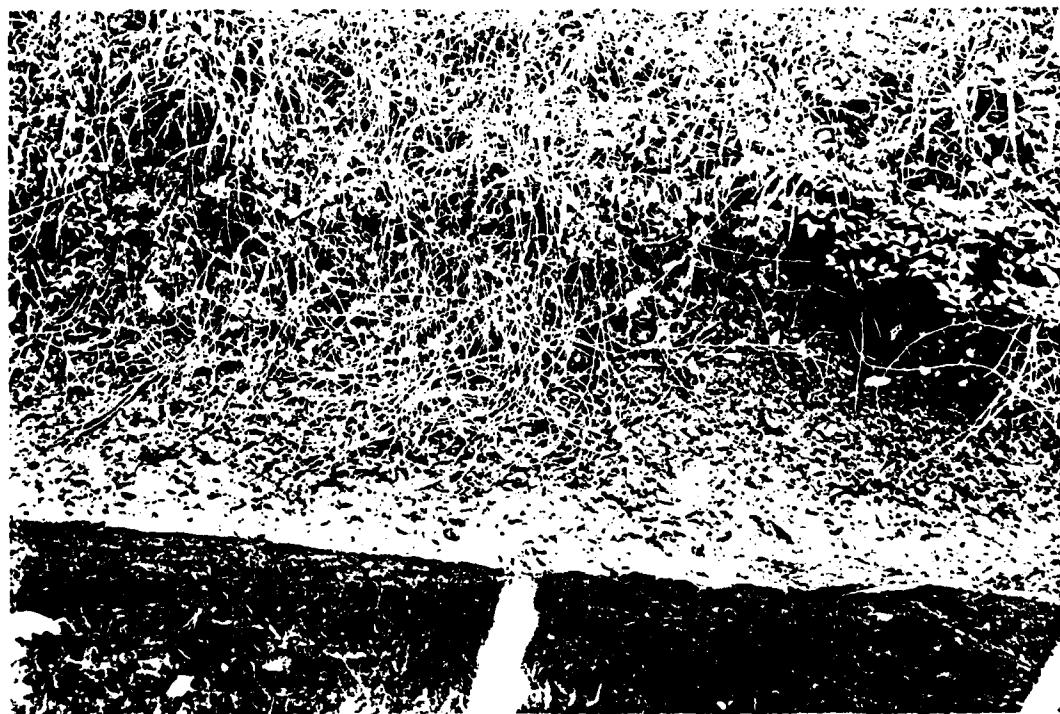


Plate 4. Oyster shells on east bank of Placentia Canal at 2850 ft. point.

Third, prehistoric archeological sites on the Georgia coast generally contain shell of oyster or other shellfish species (DePratter and Howard 1980; 1981). Surface inspection within the corridor was deemed sufficient to detect these sites. A similar survey was successfully conducted by Garrison (1981) along the nearby Casey Canal.

No significant archeological sites were found within the right-of-way, although very modern and very ancient deposits were observed at several locations. At approximately the 1850 ft. point (Locality A on Figure 1) along the right-of-way, a scatter of oyster shells was present along the eastern bank of the canal (Plate 4). Examination of these shells indicated that they are part of a recent shell dump that is still in use.

At approximately 2950 ft. (Locality B on Figure 1), recent refuse was exposed in the east canal profile and in the adjacent spoil area on the west bank of the canal (Plate 5). Refuse consisted of mid-twentieth century bottles and other debris apparently incorporated in the hauled-in fill that underlies the small business that now occupies the tract. The deposit contained only a scattering of bottles and bottle fragments, with no other category of artifact present. The deposit does not represent primary refuse and it is too recent to be of any significance.

At approximately 6750 feet (Locality C on Figure 1), the area just to the west of the canal was occupied by a recent dump. Two c. 1940's auto bodies were incorporated



Plate 5. Bottles, rubber hose, and other modern refuse in east bank of Placentia Canal at 2950 ft. point.



Plate 6. Pleistocene shells exposed in canal spoil piles. Shells include Donax, Crassostrea, and Dinocardium among others.

into this dump, but the bulk of the material was much younger. This dump, which was apparently bulldozed during canal right-of-way clearing sometime in the recent past, is disturbed, and has no archeological significance.

At approximately 6900 to 7000 feet (Locality D on Figure 1), just south of Victory Drive, the canal spoil and adjacent land contained both oyster shell and coarse gravel up to 2 inches in diameter. These shells originate in hauled-in fill and have no archeological significance.

At approximately 8700-9100 feet (Locality E on Figure 1) shell fragments were present in the spoil pile lining the west bank of the canal. These shells included (Donax spp.), oyster (Ostrea spp.), clam (Mercenaria spp.), olive (Oliva spp.) and cockle (Dinocardium spp.). These are primarily beach and open-water species and apparently were excavated from Pleistocene deposits during construction of the canal. Similar shells (Plate 6) were observed at several other places along the right-of-way (Localities F and G on Figure 1). These shells do not represent a significant archeological resource.

At approximately 13,500 feet, a small pile of oyster shells was present on the east bank of the canal. This deposit consisted of 40 to 50 fragments of oyster shell at or near the surface in a compact deposit less than one meter across. Ditches perpendicular to the Placentia Canal are located a few meters to either side of this deposit, and neither ditch contained either additional shell or any

archeological materials. Although these shells do not look like a recent deposit, no artifacts were found associated. Size (less than 1 m across) of this deposit and absence of any nearby deposits indicate that it should not be considered a significant archeological resource.

At approximately 16,800 feet (Locality I on Figure 1), Pleistocene fossils were present on the east bank of the canal adjacent to the culvert on the grounds of the Savannah Christian School. Examination of the area indicated that these fossils originated in hauled-in fill, and are therefore of no significance within the project area.

In summary, no significant archeological sites were found within the project right-of-way. This is undoubtedly due to the low elevation and poor drainage throughout the corridor. A check of the State of Georgia archeological site files in the University of Georgia Library of Archaeology indicated that no sites, either historic or prehistoric, are known from the immediate vicinity of the project area.

The canal itself is not a significant engineering feature. It is a minor part of an extensive system of canals constructed throughout Chatham County in the 19th and early 20th centuries. These canals have undergone repeated reexcavation and modification (Garrison 1981) and thus retain little, if any, of their original integrity. The canal contains no locks, gates, or other architectural or engineering features.

SUMMARY AND CONCLUSIONS

The Placentia Canal was excavated to drain part of the Placentia Tract and adjacent areas between 1872 and 1887. Construction of Placentia Canal and other similar canal systems including Cuyler/Casey and Springfield were prompted by the yellow fever epidemic of 1876. These canals were excavated by convict labor at great expense to the county and city governments. Benefits of canal construction included elimination of swampy, unhealthy lowlands, and reclamation of low-lying agricultural lands. An additional but unrecognized benefit was removal of breeding areas for mosquitoes that carried malaria.

Because of the low elevation and generally swampy conditions within the project area, no evidence of intensive prehistoric or historic utilization of the canal right-of-way was discovered. The Placentia Plantation included part or all of the Placentia Canal drainage area, but no plat showing location of the plantation buildings has been found. Archeological survey of the right-of-way revealed no significant archeological sites.

In conclusion, construction and/or excavation within the 60-meter-wide Placentia Canal corridor will not impact significant prehistoric or historic sites or other cultural resources. Pleistocene deposits that lie deeply beneath the canal may contain significant fossilized remains, but

present evidence suggests that only shoreline deposits including a diverse shell assemblage are present.

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